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## Electronic Newsletter

Winter 2006

The Perinatal Network News is a publication of the Department of Health and Mental Hygiene's (DHMH) Center for Maternal and Child Health (CMCH). It is funded through a Crenshaw Perinatal Health Initiative grant provided to the Montgomery County Health Department.

The publication is intended as a communication tool for sharing perinatal information for a statewide audience, with information and resources that address statewide issues. It is designed as a vehicle to encourage collaboration and networking throughout the state. The newsletter provides an opportunity to share information on preconception and perinatal health issues and priorities, infant morbidity and mortality, county statistical trends and perinatal and child health indicators. It is an opportunity for local programs to share their strengths and insights as well as opportunities to ask for feedback and assistance in solving a local problem.

To ensure that this newsletter is a success, we need and encourage your participation. Please let us know of any items you would like to contribute, if you have suggestions for topics or areas you would like to see covered, or if you see that incorrect information was provided or that important information was inadvertently left out.

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# Perinatal network

Maryland Department of Health and Mental Hygiene

## Maryland is 32nd!

*Maureen C. Edwards, MD, MPH, Medical Director, Center for Maternal and Child Health, DHMH*

Maryland is 32nd in infant mortality rates (IMR) according to Kids Count 2005. This is not a headline that a community wants to see. Maryland has one of the highest median household incomes and rates of higher education and a triple A bond rating as well. Since infant mortality is recognized as a measure of the overall socioeconomic status of a society, these ratings seem in sharp and inexplicable contrast.

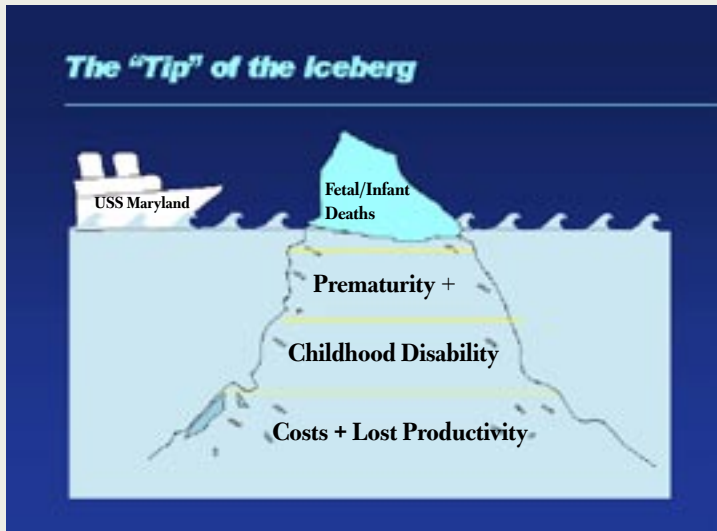
In Maryland as in other states, infant deaths have decreased dramatically over the last century. Decreasing infant mortality has been heralded as one of the great public health accomplishments of the 1900's. Progress has continued but slowed over the last ten years. Alarming in Maryland, infant mortality rates have actually risen for the last two years—the first time since 1975. In 2004, the state's infant mortality rate (expressed as infant deaths in the first year of life per 1000 live-born infants) was 8.5 per 1000. This is an increase of 15 percent from 2000 when Maryland heralded its lowest IMR ever, a rate of 7.0 per 1000. The rate of 8.5 per 1000 equates to 632 infants dying—452 in the first month of life and 180 in the remainder of the first year. Behind the numbers are individual children and grieving families!

It is important to note that in addition to infant deaths, there are approximately 600 fetal deaths in Maryland each year. These are babies who die before birth but after achieving 20 weeks gestation. Factors associated with fetal death mimic those attributed to infant mortality. Historically, because of difficulties with the documentation of these deaths, less has been known and less attention paid to these babies. Their death is no less a tragedy!

Infant mortality does not affect all children and families in equal measure. Infants weighing less than five and a half pounds (low birthweight, LBW) and particularly those under three pounds five ounces (very low birthweight, VLBW) contribute disproportionately to cases of fetal and infant death. In Maryland and the U.S. as a whole, rates of LBW and VLBW have risen over the decade. This is partially due to the increased number of multiple births associated with infertility treatment. In 2004, 9.4 percent of births or 6992 infants weighed less than five and a half pounds at birth and 2.1 percent or 1547 infants were less than three pounds five ounces. These smallest infants account for 60 percent of all infant deaths, however. Therefore addressing the prevention of low birthweight is critical to reducing infant mortality. At present, Maryland ranks 42nd in the rate of low birthweight. Again, this seems in contrast to the state's socioeconomic status and the high level of medical care available to its citizens.

Low birthweight babies may be those born prematurely or undergrown for their period of gestation. Death is not the only risk these infants face. In focusing on infant and fetal death, it is only the tip of the iceberg that burdens the community. Infants who survive frequently face acute and long-term problems

from respiratory complications to learning problems that impact their lifetime productivity. Their families are affected as well with loss of work and other drains on family resources.



Although the cause of low birthweight in an individual infant is often unknown, the path leading to the death of these tiny babies is often starkly apparent. In other circumstances, the high rate of infant mortality and other adverse outcomes is less clear. In Maryland, two to three African American babies die for every one white infant. Black mothers experience premature birth at an increased rate as well. These disparities occur across all socioeconomic groups, all educational levels and in mothers with early prenatal care. A black mother with a college education has a higher risk of her infant dying than a white mother who has not graduated from high school. The age at which white women's infant mortality rate is lowest (30-34 years) is the age at which there is the greatest disparity between black and white mothers' risk of infant death. Low-income Hispanic women who are expected to have many of the concerns related to infant mortality, actually experience comparable or even better birth outcomes than non-Hispanic white women. The traditional factors to which high infant mortality rates are attributed—low socioeconomic status, life style factors and inadequate healthcare—are all issues that must be addressed. However, it seems clear that as daunting as these issues are, corrective approaches will not be sufficient unless a broader look at factors underlying the settings of African-American infant and fetal death are investigated and that current approaches are re-engineered to be more successful in combating these disparities in the state.

In Maryland, if the Healthy People 2010 goals were met, there would be 297 fewer infant deaths, 290 less fetal deaths and 3725 more infants of normal birthweight. If black infant and fetal infant mortality rates were the same as for white infants in 2004, there would be 422 fewer black babies dying. Enough to fill an entire elementary school!

The problems of poor birth outcomes—fetal and infant death, prematurity and low birthweight—affect all members of our community. The babies themselves have the greatest price to pay, but their parents and family supports experience tremendous emotional, social and financial strains. As a society, we are deprived of our greatest natural resource, healthy productive future citizens -those who will educate our grandchildren, who will protect and care for us, and move our society to new frontiers. Babies born healthy should not be a concern only of families and healthcare providers. This is an issue for the entire community. Every person in every walk of society must reflect on how their role can contribute to the guarantee that Maryland babies are healthy.



### **Making Public Programs Work for Communities of Color: An Action Kit for Community Leaders**

This new resource from Families USA is designed to provide community leaders with the tools and resources necessary to engage in health advocacy and improve the health and well-being of their communities. Includes information on disparities in health, health care, and access. To access it, go to [www.familiesusa.org/resources/tools-for-advocates/kits/minority-health-tool-kit.html](http://www.familiesusa.org/resources/tools-for-advocates/kits/minority-health-tool-kit.html).

## Montgomery County Receives 2006 March of Dimes Community Grant

*Vanessa A. White, MPH*

The Montgomery County Department of Health and Human Services, Public Health Services' Fetal and Infant Mortality Review Board Program, in partnership with the African American Health Program's Infant Mortality Coalition, has received a 2006 Community Grant from the March of Dimes Maryland Chapter for the "Perinatal Disparities Nurse Case Management Project."

The goal of the project is to provide nurse case management to African American women in Montgomery County, who have experienced a fetal or infant loss, in order to reduce future fetal and infant mortality in this high-risk group.

In Montgomery County, the African American infant mortality rate is nearly three times the rate for the overall population. This project will provide an opportunity to work collaboratively with community partners and women known to be at high risk to reduce the disparities in birth outcomes. This nurse case management process will provide one-on-one, personalized advice and health education to African American women of childbearing age including help in utilizing the existing private and public health care and social services systems in Montgomery County. The project has been funded for one year.

The March of Dimes mission is to improve the health of babies by preventing birth defects, premature birth and infant mortality.

### New Perinatal HIV Consent Form

The AIDS Administration will be launching the new perinatal HIV consent form in March 2006. It is a streamlined version of the universal counseling and testing informed consent form. The shorter form should reduce the time needed to educate women about HIV and obtain informed consent for testing. The new form will be available on the AIDS Administration website: [www.dhmf.state.md.us/AIDS](http://www.dhmf.state.md.us/AIDS).



### HIV Rapid Testing in Labor and Delivery

The AIDS Administration implemented a survey of all Maryland delivery hospitals regarding HIV rapid testing in labor and delivery units. Although Maryland has made tremendous strides in reducing mother-to-child transmission of HIV, it is now possible to virtually eliminate perinatal HIV transmission. New rapid tests are available that allow clinicians to screen women in labor whose HIV status is unknown. Women with positive results can then be offered antiretroviral treatment to significantly reduce the risk of transmitting HIV to their newborns.

The survey assesses perinatal screening policies and practices and technical assistance needs for adoption of HIV rapid testing technology in labor and delivery. Survey results will assist the AIDS Administration to develop and implement its strategic plan for achieving statewide access to rapid HIV testing in labor and delivery. For information about HIV and AIDS in Maryland, contact Jessica Pollak-Kahn, MPH, Chief, Center for HIV Health Services, DHMH Maryland AIDS Administration at 410-767-5994 or at [jpollak@dhmf.state.md.us](mailto:jpollak@dhmf.state.md.us).

## Breastfeeding Promotion Task Force Update

*Lily Fountain, MS, CNM, RN, Faculty Clinical Instructor, Department of Family and Community Health, University of Maryland School of Nursing*

The Breastfeeding Promotion Task Force of Maryland sent representatives to the National Conference of Breastfeeding Coalitions, January 21-23 in Arlington Virginia. During this program, Dr. Maureen Edwards, Medical Director, Center for Maternal and Child Health, Department of Health and Mental Hygiene, and chair of the Maryland Task Force, as well as Amy Resnik, MS, RD, CSP, IBCLC, WIC Breastfeeding Coordinator; Hanan Aboumatar, MD, MPH, Preventive Medicine, Johns Hopkins University; and Lily Fountain, MS, CNM, University of Maryland School of Nursing represented Maryland.

They were able to network with other state breastfeeding coalitions and discuss ways of increasing community representation and involvement in the Task Force, learn about new resources for enhancing breastfeeding rates, and enhance membership and advocacy skills for promoting breastfeeding. A new resource that summarizes the most effective resources for breastfeeding interventions from the CDC can be found at: [www.cdc.gov/breastfeeding/resources/guide.htm](http://www.cdc.gov/breastfeeding/resources/guide.htm).

Readers are encouraged to visit the Maryland Breastfeeding Promotion Task Force Website at [www.marylandbreastfeeding.org](http://www.marylandbreastfeeding.org). For further information about the Maryland Breastfeeding Promotion Task Force, please contact Mary Johnson at: [mdjohnson@dhmf.state.md.us](mailto:mdjohnson@dhmf.state.md.us) or phone: 410-767-5581



# HEAL: A Regional Pilot Project to Provide Coordinated Care to Women Who Have Experienced a Loss

*Karen Angelici, MPP, Bureau Chief for Maternal and Infant Care, Division of Maternal and Child Health, Baltimore City Health Department*

## What is the HEAL Project?

The Baltimore City Health Department, together with its partners, including Mercy Medical Center, the Anne Arundel County Health Department, the Baltimore County Health Department, First Candle/SIDS Alliance, and Baltimore Health Care Access, Inc., launched the HEAL pilot project on February 1, 2005. HEAL stands for "Helping Everyone After a Loss" and is designed to provide coordinated and comprehensive care to women who experience a fetal or infant death at Mercy Medical Center with the aim of preventing a repeat loss. Project start-up is funded by the Maryland Department of Health and Mental Hygiene. The HEAL project is intended to serve as a model for other hospitals in Baltimore and elsewhere.

## Why is the HEAL Project Needed?

Baltimore's Fetal and Infant Mortality Review Team is a multi-disciplinary team (hosted at Mercy), which reviews cases of infant and fetal deaths monthly and makes recommendations to prevent future poor outcomes. In 2002, the FIMR Team identified the need for improved care for women following a loss as one of its top priorities for action. Detailed case reviews revealed a high incidence of repeat losses and showed very little in terms of coordinated care offered to women following the loss. For example, few received bereavement counseling, medical assessment, family planning or interconceptional follow-up after a loss.

In addition to the evidence gathered from detailed case reviews, analysis of death data, conducted by MedChi from 2000 to 2002, confirmed that a history of a fetal or infant loss is a leading predictor in Baltimore for a future loss. Results revealed, for example, that 46 percent of women who experienced an infant loss had already experienced a fetal or infant loss in a previous pregnancy. Recent reviews of fetal and infant death cases continue to support the need for improved care for women after a loss to prevent repeat losses and to improve future birth outcomes.

## Whom Does the HEAL Project Serve?

Women who present at Mercy and who meet any of the following criteria will receive care through HEAL:

- ☐ Present with a first trimester miscarriage and have a history of one or more miscarriages;
- ☐ Experience any loss in the second or third trimester; and
- ☐ Experience the death of an infant in the NICU or due to SIDS or other causes.

## What Does the HEAL Project Provide?

All participating Mercy Departments (Labor and Delivery, Outpatient Surgery, Neonatal Intensive Care Unit, Emergency Department, Pastoral Care) will ensure that participants receive:

- ☐ Bereavement support through the Pastoral Care Department to help cope with the loss;
- ☐ A complete medical evaluation to determine possible causes for the loss and to help prepare for a future pregnancy;



## National SIDS/Infant Death Resource Center (NSIDRC) Updated List

Provides information about selected publications, organizations, and other resources developed for bereaved parents and family members. In addition, there are resources for caregivers and professionals who work with parents.

They have also divided special topics into categories such as materials for children and teens, religious books, Spanish resources, journal articles, and selected publishers.

Go to: [www.sidscenter.org/](http://www.sidscenter.org/).

*Continued..*

- ❑ If desired counseling on family planning and provision of a contraceptive method at discharge, to protect one's health and future pregnancies; and
- ❑ A referral to a city or county health department for home visiting services to assist with follow-up care and to provide interconceptional case management services.

### What Has Been Done to Prepare for the HEAL Project Launch

Since September 2005, HEAL partners have been working to finalize new hospital and health department procedures and protocols to be used in the pilot. In addition, partner staff have received a formal orientation to the pilot through grand rounds-style presentations, and changes in knowledge have been measured through pre and post-test questionnaires. Also, more than 100 nurses, social workers and outreach staff have received bereavement training specific to fetal/infant loss from First Candle/SIDS Alliance. Monthly HEAL team meetings will be held to review all cases of women who participate in the pilot. Training for participating staff will continue for the next several months. A publication entitled, "The HEAL Project: A Guide for Providing Coordinated Care for Families Following a Fetal or Infant Loss," which was adapted in part from materials produced by MedChi and First Candle/SIDS Alliance, is scheduled to be published by Summer 2006.

For questions, contact Karen Angelici, Bureau Chief for Maternal and Infant Care at the Baltimore City Health Department, 410-396-3769, e-mail: [karen.angelici@baltimorecity.gov](mailto:karen.angelici@baltimorecity.gov).



### Women Whose Infants Die From SIDS Have Increased Risk of Complications in Subsequent Pregnancies

Women whose infants die from sudden infant death syndrome are at an increased risk of complications in subsequent pregnancies, according to a study published in the Dec. 27 issue of the journal *Lancet*. SIDS, also known as crib death or cot death, is a leading cause of death in infants younger than one year old in developed countries. In the study, Gordon Smith, a professor of obstetrics and gynecology at the University of Cambridge in the United Kingdom, and colleagues linked national UK databases of maternity-hospital discharges, perinatal deaths, and death certifications and studied 258,096 women in Scotland who had consecutive births between 1985 and 2001. According to the study, women whose first infants died from SIDS were between two and three times as likely to deliver infants below normal weight and between two and three times as likely to have a preterm delivery as other women. The researchers adjusting their findings for maternal age, parity, marital status, socio-economic status and smoking, said the findings are explained by "common maternal risk factors for pregnancy complications and SIDS and by the well-recognized tendency of obstetric complications to recur."

The authors speculate that the association between SIDS in one pregnancy and obstetric complications in other pregnancies partly explains the tendency for SIDS events to recur.

*Sudden infant death syndrome and complications in other pregnancies, Smith GC, Wood AM, Pell JP, Dobbie R. The Lancet - Vol. 366, Issue 9503, 17 December 2005*

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## Update from Healthy Start Program, Washington County

*Virginia Emerson, RNC, Supervisor, Healthy Start Program Washington County*

**Gun Safety**—in an effort to heighten awareness of gun safety in families visited by Healthy Start nurses, we have developed a flyer entitled "Gun Safety Tips" that we give to all clients on the first home visit. The flyer contains information about the prevalence of guns in homes, safety precautions to decrease the risk of gun injury, and instructions in obtaining free gun locks. We also have Gun Safety Kits available. Each kit contains a gun lock with instructions for use, a refrigerator magnet with safety information, and an educational booklet. Refrigerator magnets and information about Gun Safety may be obtained from "Common Sense about Kids and Guns," a non-profit, non-partisan organization that is endorsed by the American Academy of Pediatrics. For more information, access the website at [www.kidsandguns.org](http://www.kidsandguns.org).

**Smoking Cessation**—because very few pregnant women enroll in group smoking cessation classes, Healthy Start nurses are now able to refer interested clients to the Smoking Cessation Counselor here at the Health Department. Based on the client's individual need, she can opt to call the Smoking Cessation phone number for support anytime during business hours, can receive incoming supportive phone calls from a counselor at regular intervals, or can meet with a Smoking Cessation counselor individually at the Health Department. For women who have quit smoking, the counselor is willing to provide ongoing phone support after the nurse's postpartum visit.

We are very grateful for the Smoking Cessation Program for partnering with us in our efforts to improve services to our pregnant women!

# Body Sense Helps Teen Smokers Quit While They're Ahead

*Tara Snyder, Health Educator, Center for Health Promotion, Maryland Department of Health and Mental Hygiene*

Smoking during pregnancy is one of the most preventable causes of illness and death among mothers and infants. It is associated with increased risks for pre-term premature rupture of membranes, abrupted placenta, and placenta previa, as well as increased risk for pre-term delivery. Infants born to women who smoke during pregnancy have a lower average birth weight and are more likely to be small for gestational age than are infants born to women who do not smoke. Women who manage to quit smoking before or during pregnancy reduce the risk of these adverse outcomes.

Helping young women to quit smoking in the early, experimental stages of their tobacco use—before they become addicted—is a key goal of the Maryland Department of Health and Mental Hygiene's (DHMH) Body Sense teen intervention program. The Body Sense newsletter is a colorful, youth-oriented publication that explores smoking in relation to topics of interest to the young female population: appearance and body image, relationships, stress, and peer pressure. In family planning clinics statewide, clinicians use the Body Sense newsletter in conjunction with motivational interviewing to encourage behavior change among teen clients who smoke.

"Many of the teens we see are casual, social smokers," explained one family planning nurse from Harford County. "They may smoke only at parties or when they're with certain friends. Often they don't smoke every day. To be most effective, we have to reach this population before the habit escalates and addiction sets in."

While pressure to 'fit in' with friends encourage some teens to start smoking, other factors including stress, anxiety, and boredom weigh in as well. Recent studies have confirmed that teens experiencing high levels of these emotions are much more likely to engage in unhealthy behaviors such as smoking and overeating. Parental influence plays an important role as well. Youth may try smoking as an act of rebellion against parental authority—or to imitate what their parents do. One study showed that teens whose mothers smoked had an 85 percent increased risk of becoming smokers themselves.

The Body Sense newsletter uses these issues to tailor anti-tobacco messages to this vulnerable population. Since teens don't worry about the long-term health consequences of smoking (cancer, emphysema) the way adult smokers do, they need materials that address their here-and-now concerns: appearance, sports performance, coping with stress and pressure from parents, teachers and friends.

Teens who read Body Sense are encouraged to offer their feedback by filling out a short, tear-out survey and returning it to a clinician in exchange for a small incentive item. Response to the premier issue of Body Sense, distributed last fall, has been positive. Of teens who returned the reader survey, 80 percent said they had "learned new things about the effects of smoking," and "were starting to think about quitting."

The Body Sense newsletter is available to family planning clinics and local health departments. If you have comments about Body Sense, topic suggestions for future issues, or would like to request copies for your clinic, contact Jade Leung, Program Coordinator, at 410-767-2919. You can also download a copy of Body Sense at: [www.fha.state.md.us/ohpetup/html/matteen.html](http://www.fha.state.md.us/ohpetup/html/matteen.html).

## Promo Materials for the 2006 National Day to Prevent Teen Pregnancy

Put in your order now for all promotional materials for the National Day to Prevent Teen Pregnancy on May 3. This year, the National Campaign to Prevent Teen Pregnancy is offering National Day posters, postcards, wristbands, temporary tattoos, and pens. National Day supplies are limited, so order now!

[www.teenpregnancy.org/Default.asp?bhcp=1](http://www.teenpregnancy.org/Default.asp?bhcp=1).





## Fetuses, Infants Exposed to Herpes B During, After Pregnancy at Increased Risk for Cerebral Palsy

Fetuses exposed to herpes B which causes chicken pox and shingles, and infants exposed to the virus immediately after birth have a higher risk of developing cerebral palsy than other infants. Catherine Gibson and colleagues from Adelaide Women's and Children's Hospital in Adelaide, Australia, between 1986 and 1999 analyzed blood samples taken within a few days of delivery from 443 infants born with cerebral palsy and 883 infants born without the condition. According to Gibson, fetuses and infants exposed to the herpes B virus (also known as varicella zoster virus), which can cross the placenta during pregnancy and infect the fetus or infant before or after birth, are twice as likely to develop cerebral palsy. Whether the pregnant woman's infection crosses the placenta depends on the gestation of the fetus at the time of the pregnant woman's infection, the structure of the virus and if the infection is recurring at the time of pregnancy. "It is unclear how perinatal exposure to viral infection causes subsequent brain damage and cerebral palsy," Gibson said, adding, "If the virus is able to cross the blood-brain barrier, it is capable of setting up infection in the brain and directly damaging vulnerable neuronal tissue." She added that other factors, including susceptibility to infection or preterm birth, might play a role in the development of cerebral palsy.

Yvonne Wu, an Assistant Professor of neurology and pediatrics at the University of California-San Francisco, said, "It is important to remember that, although these findings may help us better understand the complex processes leading to cerebral palsy, the viruses linked to cerebral palsy in this study are commonly present, and only increase the risk of cerebral palsy by a very small degree." She added that it is unclear how exposure to herpes B could cause brain injury in the fetus or infant.

*Neurotropic viruses and cerebral palsy: population based case-control study. Catherine S. Gibson, Alastair H. MacLennan, Paul N. Goldwater, Eric A. Haan, Kevin Priest, Gustaaf A. Dekker, South Australian Cerebral Palsy Research Group. BMJ 2006; 332: 76-80.*

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## Statewide Review Assesses Preventability of Pregnancy-related Deaths

Using multiple methods to identify pregnancy-related deaths in North Carolina in 1995-1999, it was found that 40 percent of these deaths could potentially have been prevented. The review determined the cause of death, whether the death was potentially preventable, and, if it was, whether it could potentially have been prevented through changes in preconception care, patient actions, the health care system, or quality of care.

A death was classified as potentially preventable if the death could have been averted by one or more changes in the health care system related to clinical care, facility infrastructure, public health infrastructure, or patient factors. For each death classified as potentially preventable, a determination was made about the way(s) in which it might have been averted. The final analysis assessed the difference in the proportions of potentially preventable deaths among white vs. African American women.

The authors found that:

- ◆ Of the 102 deaths deemed preventable, 40 percent were deemed preventable through changes in at least one of the study areas.
- ◆ Approximately 90 percent of deaths due to hemorrhage or complications of chronic diseases were preventable, compared with none of the deaths due to cerebrovascular accident, amniotic fluid emboli, or microangiopathic hemolytic syndromes.
- ◆ Improved medical care (quality of care) was most important in preventing deaths due to hemorrhage and infection, whereas preconception care could have prevented more than half of the deaths due to chronic medical conditions.
- ◆ 46 percent of the deaths among African American women were preventable, compared with 33 percent of the deaths among white women, a difference that was statistically significant.

*Berg CJ, Harper MA, Atkinson MS, et al. 2005. Preventability of pregnancy-related deaths: Results of a state-wide review. Obstetrics and Gynecology 106(6):1228-1234. Abstract available at: [www.greenjournal.org/](http://www.greenjournal.org/).*

Put in the article title in the keyword Quick Search.

# CDC Revises Immunization Recommendations for Hepatitis B Prevention

*John Ward, MD, Director, Division of Viral Hepatitis, National Center for Infectious Diseases, Centers for Disease Control and Prevention; and Lance Rodewald, MD, Director, Division of Immunization Services, National Immunization Program, Centers for Disease Control and Prevention*

In order to ensure that newborn infants are protected from hepatitis B virus (HBV) infection, a major cause of cirrhosis and liver cancer in the United States, the Advisory Committee on Immunization Practices (ACIP) now recommends that, except on a case-by-case basis and only in rare circumstances, universal infant hepatitis B vaccination should begin at birth. Previously, the ACIP noted a preference for giving the first dose at birth, but also recommended that infants born to uninfected mothers could receive the first dose at age one-two months. To prevent HBV transmission among children at greatest risk for HBV infection, the ACIP also recommends that prenatal care providers, delivery hospitals, and health departments implement policies and procedures to identify and manage children born to infected mothers and mothers with unknown HBV infection status. The ACIP statement, including all of the revised recommendations, is available from CDC in the Morbidity and Mortality Weekly Report: [www.cdc.gov/mmwr/PDF/rr/rr5416.pdf](http://www.cdc.gov/mmwr/PDF/rr/rr5416.pdf). Below is a synopsis of the updated recommendations.

## Recommendations for Prenatal Care Providers

Management of all pregnant women:

- ▼ Test all pregnant women for hepatitis B surface antigen (HBsAg) during each pregnancy.
- ▼ Transfer a copy of the original laboratory report of the pregnant woman's HBsAg test result to the patient's medical record in the delivery hospital.
- ▼ Inform pregnant women of the importance of newborn hepatitis B vaccination.
- ▼ Vaccinate pregnant women who are at risk for HBV infection.

## Management of pregnant women with chronic HBV infection:

- ▼ Inform HBsAg-positive women of HBV transmission risks and ways to prevent HBV infection, including the importance of postexposure prophylaxis for newborn infants and hepatitis B vaccination of household, sexual, and needle-sharing contacts.
- ▼ Refer HBsAg-positive women to an appropriate case-management program to ensure that their newborn infants receive timely postexposure prophylaxis and follow-up.
- ▼ Provide or refer HBsAg-positive women for appropriate medical management of their chronic HBV infection.

## Recommendations for Delivery Hospitals

- ▼ Implement standing orders to ensure that, except in rare circumstances, all newborns with birth weights of greater than or equal to 2 kilograms receive hepatitis B vaccine before discharge.

*Editor's note: In the MMWR ACIP Statement (footnote on page 9, MMWR, 12-23-05), this bullet is further explained with the following information: On a case-by-case basis and only in rare circumstances, the first dose may be delayed until after hospital discharge for an infant who weighs greater than or equal to 2 kilograms and whose mother is HBsAg negative, but only if a physician's order to withhold the birth dose and a copy of the mother's original HBsAg-negative laboratory report during this pregnancy are placed in the infant's medical record.*

## CDC Provides Online Information About the New Hepatitis B Recommendations

CDC's Division of Viral Hepatitis has created a web section featuring resources related to the new ACIP hepatitis B recommendations. The page includes links to the following:

- ▶ frequently asked questions about the new recommendations
- ▶ frequently asked questions about foreign-born persons and hepatitis B
- ▶ state perinatal hepatitis B prevention program coordinators
- ▶ the Vaccines for Children program
- ▶ "Progress Towards Elimination of Perinatal and Childhood Hepatitis B Virus Infections," a PowerPoint presentation from the National Viral Hepatitis Prevention Conference, December 7, 2005.

To access this information, and more, go to:

[www.cdc.gov/ncidod/diseases/hepatitis/b/acip.htm](http://www.cdc.gov/ncidod/diseases/hepatitis/b/acip.htm).





- ▼ Implement policies and procedures to ensure that all infants born to HBsAg-positive mothers and all infants born to mothers with unknown HBsAg status are identified and receive appropriate immunoprophylaxis.

These policies and procedures should include the following standing orders:

- ▼ Review HBsAg test results for all pregnant women at the time of admission for labor and delivery.
- ▼ Conduct HBsAg testing as soon as possible after admission for pregnant women who do not have a documented HBsAg result and for pregnant women identified as being at risk for HBV infection during pregnancy (e.g., >1 sex partner in the previous 6 months, evaluation or treatment for a sexually transmitted disease, recent or current injection-drug use, HBsAg-positive sex partner).
- ▼ Administer hepatitis B vaccine and hepatitis B immune globulin within 12 hours of birth to all infants born to HBsAg-positive mothers.
- ▼ Administer hepatitis B vaccine within 12 hours of birth to all infants born to mothers with unknown HBsAg status.
- ▼ Document on the infant's medical record the maternal HBsAg test results and the infant's hepatitis B immunization.

## Recommendations for Health Departments

- ▼ Provide or assure case-management services to ensure that:
  - ▮ all pregnant women are tested for HBsAg during each pregnancy, and
  - ▮ infants born to HBsAg-positive women and infants born to women with unknown HBsAg status receive recommended immunoprophylaxis and follow-up.

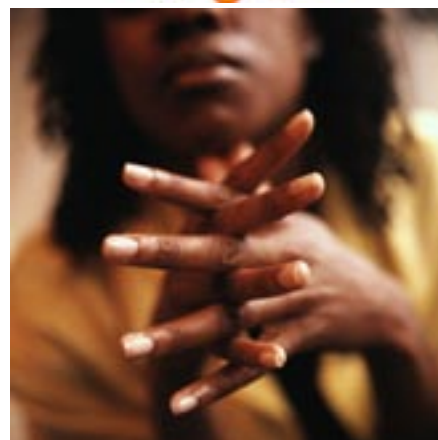
Before hepatitis B vaccination became routine in the United States, transmission of HBV infection perinatally and during early childhood caused an estimated 30 percent-40 percent of chronic HBV infections. Approximately 25 percent of chronically infected children die prematurely from cirrhosis or liver cancer. The majority of chronically infected persons remain asymptomatic until the onset of cirrhosis or end-stage liver disease.

These recommendations update the ACIP strategy to eliminate HBV transmission in the United States. This strategy has been implemented with considerable success and has resulted in a substantial decline in hepatitis B incidence in the United States. However, challenges remain to eliminate perinatal and childhood HBV transmission. In particular, CDC estimates that only about half of expected births to HBsAg-positive mothers are identified for case management, which is needed to maximize on-time delivery of postexposure immunoprophylaxis. In addition, errors in management of infants born to HBsAg-positive mothers and infants born to mothers with unknown HBsAg status have kept many of these infants from receiving appropriate immunoprophylaxis to prevent HBV infection.

On February 2, 2006, CDC hosted an Internet conference to discuss the new ACIP recommendations. This conference was intended for physicians, nurses, administrators, and other medical professionals, particularly hospital obstetrical and neonatal staff, prenatal care providers, professional organizations involved in perinatal care, and public health staff. The one-hour program combined a telephone audio conference with online visual content. Visit the following website for replay and viewing of the slides: [www.cdc.gov/nip/ed/ciinc/#archive](http://www.cdc.gov/nip/ed/ciinc/#archive).

Additional resources may be found at the following website: [www.cdc.gov/ncidod/diseases/hepatitis/b/acip.htm](http://www.cdc.gov/ncidod/diseases/hepatitis/b/acip.htm).

For more information, contact: Mary Ann Harder, M.S., R.N., Perinatal Hepatitis B Prevention Coordinator, Center for Immunization, Maryland Department of Health and Mental Hygiene. Phone: 410-767-5716, e-mail: [harderm@dhmh.state.md.us](mailto:harderm@dhmh.state.md.us).



## HIV and African Americans

The Kaiser Family Foundation is releasing an updated fact sheet on African Americans and HIV/AIDS, which highlights the epidemic's impact on African Americans, providing current data and trends over time. African Americans account for more AIDS diagnoses, people estimated to be living with AIDS, and HIV-related deaths than any other racial or ethnic group in the U.S.

The percentage of AIDS diagnoses occurring among African Americans has risen from 25 percent in 1985 to approximately half in 2004. African American women are also especially affected, accounting for two-thirds (67 percent) of new AIDS cases among women. The updated fact sheet is available at [www.kff.org/hiv/aids/6089.cfm](http://www.kff.org/hiv/aids/6089.cfm).

# Recommended Childhood and Adolescent Immunization Schedule UNITED STATES • 2006

Vaccine ▼	Age ►	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	24 months	4–6 years	11–12 years	13–14 years	15 years	16–18 years
Hepatitis B <sup>1</sup>	HepB	HepB	HepB	HepB <sup>1</sup>	HepB	HepB	HepB	HepB	HepB	HepB Series	HepB Series	HepB Series	HepB Series	HepB Series	HepB Series
Diphtheria, Tetanus, Pertussis <sup>2</sup>	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	DTaP	Tdap	Tdap	Tdap	Tdap	Tdap
<i>Haemophilus influenzae</i> type b <sup>3</sup>	Hib	Hib	Hib	Hib <sup>3</sup>	Hib	Hib	Hib	Hib	Hib	Hib	Hib	Hib	Hib	Hib	Hib
Inactivated Poliovirus	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV	IPV
Measles, Mumps, Rubella <sup>4</sup>	MMR	MMR	MMR	MMR	MMR	MMR	MMR	MMR	MMR	MMR	MMR	MMR	MMR	MMR	MMR
Varicella <sup>5</sup>	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella	Varicella
Meningococcal <sup>6</sup>	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4	MCV4
Pneumococcal <sup>7</sup>	PCV	PCV	PCV	PCV	PCV	PCV	PCV	PCV	PCV	PCV	PPV	PPV	PPV	PPV	PPV
Influenza <sup>8</sup>	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)	Influenza (Yearly)
Hepatitis A <sup>9</sup>	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series	HepA Series

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2005, for children through age 18 years. Any dose not administered at the recommended age should be administered at any subsequent visit when indicated and feasible. Range of recommended ages Indicates age groups that warrant special effort to administer those vaccines not previously administered. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever

any components of the combination are indicated and other components of the vaccine are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Providers should consult the respective ACIP statement for detailed recommendations. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance about how to obtain and complete a VAERS form is available at [www.vaers.hhs.gov](http://www.vaers.hhs.gov) or by telephone, 800-822-7967.

Range of recommended ages

Catch-up immunization

11–12 year old assessment

**1. Hepatitis B vaccine (HepB).** **AT BIRTH:** All newborns should receive monovalent HepB soon after birth and before hospital discharge. **Infants born to mothers who are HBsAg-positive** should receive HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth. **Infants born to mothers whose HBsAg status is unknown** should receive HepB within 12 hours of birth. The mother should have blood drawn as soon as possible to determine her HBsAg status; if HBsAg-positive, the infant should receive HBIG as soon as possible (no later than age 1 week). **For infants born to HBsAg-negative mothers,** the birth dose can be delayed in rare circumstances but only if a physician's order to withhold the vaccine and a copy of the mother's original HBsAg-negative laboratory report are documented in the infant's medical record. **FOLLOWING THE BIRTHDOSE:** The HepB series should be completed with either monovalent HepB or a combination vaccine containing HepB. The second dose should be administered at age 1–2 months. The final dose should be administered at age ≥24 weeks. It is permissible to administer 4 doses of HepB (e.g., when combination vaccines are given after the birth dose); however, if monovalent HepB is used, a dose at age 4 months is not needed. **Infants born to HBsAg-positive mothers** should be tested for HBsAg and antibody to HBsAg after completion of the HepB series, at age 9–18 months (generally at the next well-child visit after completion of the vaccine series).

**2. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).** The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose and the child is unlikely to return at age 15–18 months. The final dose in the series should be given at age ≥4 years.

**Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap – adolescent preparation)** is recommended at age 11–12 years for those who have completed the recommended childhood DTP/DTaP vaccination series and have not received a Td booster dose. Adolescents 13–18 years who missed the 11–12-year Td/Tdap booster dose should also receive a single dose of Tdap if they have completed the recommended childhood DTP/DTaP vaccination series. Subsequent **tetanus and diphtheria toxoids (Td)** are recommended every 10 years.

**3. *Haemophilus influenzae* type b conjugate vaccine (Hib).** Three Hib conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB® or ComVax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required. DTaP/Hib combination products should not be used for primary immunization in infants at ages 2, 4 or 6 months but can be used as boosters after any Hib vaccine. The final dose in the series should be administered at age ≥12 months.

**4. Measles, mumps, and rubella vaccine (MMR).** The second dose of MMR is recommended routinely at age 4–6 years but may be administered during any visit, provided at least 4 weeks have elapsed since the first dose and both doses are administered beginning at or after age 12 months. Those who have not previously received the second dose should complete the schedule by age 11–12 years.

**5. Varicella vaccine.** Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children (i.e., those who lack a reliable history of chickenpox). Susceptible persons aged ≥13 years should receive 2 doses administered at least 4 weeks apart.

**6. Meningococcal vaccine (MCV4).** Meningococcal conjugate vaccine (MCV4) should be given to all children at the 11–12 year old visit as well as to unvaccinated adolescents at high school entry (15 years of age). Other adolescents who wish to decrease their risk for meningococcal disease may also be vaccinated. All college freshmen living in dormitories should also be vaccinated, preferably with MCV4, although **meningococcal polysaccharide vaccine (MPSV4)** is an acceptable alternative. Vaccination against invasive meningococcal disease is recommended for children and adolescents aged ≥2 years with terminal complement deficiencies or anatomic or functional asplenia and certain other high risk groups (see *MMWR* 2005;54 [RR-7]:1-21); use MPSV4 for children aged 2–10 years and MCV4 for older children, although MPSV4 is an acceptable alternative.

**7. Pneumococcal vaccine.** The heptavalent **pneumococcal conjugate vaccine (PCV)** is recommended for all children aged 2–23 months and for certain children aged 24–59 months. The final dose in the series should be given at age ≥12 months. **Pneumococcal polysaccharide vaccine (PPV)** is recommended in addition to PCV for certain high-risk groups. See *MMWR* 2000; 49(RR-9):1-35.

**8. Influenza vaccine.** Influenza vaccine is recommended annually for children aged ≥6 months with certain risk factors (including, but not limited to, asthma, cardiac disease, sickle cell disease, human immunodeficiency virus [HIV], diabetes, and conditions that can compromise respiratory function or handling of respiratory secretions or that can increase the risk for aspiration), healthcare workers, and other persons (including household members) in close contact with persons in groups at high risk (see *MMWR* 2005;54[RR-8]:1-55). In addition, healthy children aged 6–23 months and close contacts of healthy children aged 0–5 months are recommended to receive influenza vaccine because children in this age group are at substantially increased risk for influenza-related hospitalizations. For healthy persons aged 5–49 years, the intranasally administered, live, attenuated influenza vaccine (LAIV) is an acceptable alternative to the intramuscular trivalent inactivated influenza vaccine (TIV). See *MMWR* 2005;54(RR-8):1-55. Children receiving TIV should be administered a dosage appropriate for their age (0.25 mL if aged 6–35 months or 0.5 mL if aged ≥3 years). Children aged ≤8 years who are receiving influenza vaccine for the first time should receive 2 doses (separated by at least 4 weeks for TIV and at least 6 weeks for LAIV).

**9. Hepatitis A vaccine (HepA).** HepA is recommended for all children at 1 year of age (i.e., 12–23 months). The 2 doses in the series should be administered at least 6 months apart. States, counties, and communities with existing HepA vaccination programs for children 2–18 years of age are encouraged to maintain these programs. In these areas, new efforts focused on routine vaccination of 1-year-old children should enhance, not replace, ongoing programs directed at a broader population of children. HepA is also recommended for certain high risk groups (see *MMWR* 1999; 48[RR-12]:1-37).

The Childhood and Adolescent Immunization Schedule is approved by:

Advisory Committee on Immunization Practices [www.cdc.gov/nip/acip](http://www.cdc.gov/nip/acip) • American Academy of Pediatrics [www.aap.org](http://www.aap.org) • American Academy of Family Physicians [www.aafp.org](http://www.aafp.org)

# Recommended Immunization Schedule for Children and Adolescents Who Start Late or Who Are More Than 1 Month Behind

The tables below give catch-up schedules and minimum intervals between doses for children who have delayed immunizations. There is no need to restart a vaccine series regardless of the time that has elapsed between doses. Use the chart appropriate for the child's age.

CATCH-UP SCHEDULE FOR CHILDREN AGED 4 MONTHS THROUGH 6 YEARS					
Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Diphtheria, Tetanus, Pertussis	6 wks	4 weeks	4 weeks	6 months	6 months <sup>1</sup>
Inactivated Poliovirus	6 wks	4 weeks	4 weeks	4 weeks <sup>2</sup>	
Hepatitis B <sup>3</sup>	Birth	4 weeks	8 weeks (and 16 weeks after first dose)		
Measles, Mumps, Rubella	12 mo	4 weeks <sup>4</sup>			
Varicella	12 mo				
<i>Haemophilus influenzae</i> type b <sup>5</sup>	6 wks	4 weeks if first dose given at age <12 months	4 weeks <sup>6</sup> if current age <12 months	8 weeks (as final dose) This dose only necessary for children aged 12 months–5 years who received 3 doses before age 12 months	
		8 weeks (as final dose) if first dose given at age 12–14 months	8 weeks (as final dose) <sup>6</sup> if current age ≥12 months and second dose given at age <15 months		
		No further doses needed if first dose given at age ≥15 months	No further doses needed if previous dose given at age ≥15 mo		
Pneumococcal <sup>7</sup>	6 wks	4 weeks if first dose given at age <12 months and current age <24 months	4 weeks if current age <12 months	8 weeks (as final dose) This dose only necessary for children aged 12 months–5 years who received 3 doses before age 12 months	
		8 weeks (as final dose) if first dose given at age ≥12 months or current age 24–59 months	8 weeks (as final dose) if current age ≥12 months		
		No further doses needed for healthy children if first dose given at age ≥24 months	No further doses needed for healthy children if previous dose given at age ≥24 months		



CATCH-UP SCHEDULE FOR CHILDREN AGED 7 YEARS THROUGH 18 YEARS			
Vaccine	Minimum Interval Between Doses		
	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Booster Dose
Tetanus, Diphtheria <sup>8</sup>	4 weeks	6 months	6 months if first dose given at age <12 months and current age <11 years; otherwise 5 years
Inactivated Poliovirus <sup>9</sup>	4 weeks	4 weeks	IPV <sup>2,9</sup>
Hepatitis B	4 weeks	8 weeks (and 16 weeks after first dose)	
Measles, Mumps, Rubella	4 weeks		
Varicella <sup>10</sup>	4 weeks		

**1. DTaP.** The fifth dose is not necessary if the fourth dose was administered after the fourth birthday.

**2. IPV.** For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if third dose was administered at age ≥4 years. If both OPV and IPV were administered as part of a series, a total of 4 doses should be given, regardless of the child's current age.

**3. HepB.** Administer the 3-dose series to all children and adolescents <19 years of age if they were not previously vaccinated.

**4. MMR.** The second dose of MMR is recommended routinely at age 4–6 years but may be administered earlier if desired.

**5. Hib.** Vaccine is not generally recommended for children aged ≥5 years.

**6. Hib.** If current age <12 months and the first 2 doses were PRP-OMP (PedvaxHIB® or ComVax® [Merck]), the third (and final) dose should be administered at age 12–15 months and at least 8 weeks after the second dose.

**7. PCV.** Vaccine is not generally recommended for children aged ≥5 years.

**8. Td.** Adolescent tetanus, diphtheria, and pertussis vaccine (Tdap) may be substituted for any dose in a primary catch-up series or as a booster if age appropriate for Tdap. A five-year interval from the last Td dose is encouraged when Tdap is used as a booster dose. See ACIP recommendations for further information.

**9. IPV.** Vaccine is not generally recommended for persons aged ≥18 years.

**10. Varicella.** Administer the 2-dose series to all susceptible adolescents aged ≥13 years.

Report adverse reactions to vaccines through the federal Vaccine Adverse Event Reporting System. For information on reporting reactions following immunization, please visit [www.vaers.hhs.gov](http://www.vaers.hhs.gov) or call the 24-hour national toll-free information line 800-822-7967. Report suspected cases of vaccine-preventable diseases to your state or local health department.

For additional information about vaccines, including precautions and contraindications for immunization and vaccine shortages, please visit the National Immunization Program Website at [www.cdc.gov/nip](http://www.cdc.gov/nip) or contact 800-CDC-INFO (800-232-4636) (In English, En Español — 24/7)



# Emergency Response Planning for Providers Training

*Jennifer Arnáiz, Training Coordinator, Montgomery County Child Care Resource and Referral Center*

Our world changed forever on 9/11/01. We quickly learned terms like biological threat and sheltering-in-place. Recent events, such as Hurricane Katrina, further changed our views on natural disasters that could potentially effect us. While the federal government has worked to strengthen our nation's response to disasters, citizens are encouraged to develop a family plan for emergencies or disasters. This task proved to be a challenge for the child care community who had to develop a plan for the safety and emotional well being of children for several extra hours or even days without assistance during times of crisis and confusion.

The Montgomery County Child Care Resource and Referral Center (MCCCRRC) through a grant provided by Advance Practice Centers, developed Emergency Response Planning for Providers, a training specific to the county's child care community. Providers receive a kit that included tools and strategies that assist program leaders in developing an emergency plan that reflects the needs of their individual child care program. In addition, time was dedicated to addressing the social and emotional needs of young children experiencing trauma and stress. In the Spring of 2005, 30 child care providers representing family child care and center based programs participated in the pilot program. In addition to receiving the kit, providers also received hand-crank radios, flashlights and other materials to assist in emergency planning. The training event was a huge success. In follow up evaluations, providers indicated that immediately after the training, policy changes were implemented in their program and more communication with parents was initiated to discuss emergency response planning.

In order to offer this training to more child care providers and build trainer capacity, MCCCRRC offered a free "Train the Trainer" workshop to community partners in the winter of 2005. Over the next year, the goal is to offer this training to 300 additional providers. In addition, Montgomery County Public Health Services has partnered with the MCCCRRC and the local Family Child Care Association to assist critical service workers with developing Family Emergency Plans, in case of a catastrophic event that is likely to keep one or both parents working for long hours and extended periods of time. Through this initiative, entitled Ready Montgomery, family child care providers will participate in a comprehensive orientation and attend a training program on Emergency Response Planning for Providers. The providers will be recognized for their efforts with special incentives. Employers will inform critical service workers about the project through their Human Resource offices and other outreach efforts.

If you would like more information about this training, please contact Jennifer Arnáiz, Training Coordinator via e-mail at [jennifer.arnáiz@montgomerycountymd.gov](mailto:jennifer.arnáiz@montgomerycountymd.gov).



## Infant Death Scene Investigation Tool Available

The Sudden Unexplained Infant Death Investigation (SUIDI) Reporting Form is a guide for novice and veteran investigators of infant deaths and is designed to ensure that information is collected in a consistent, sensitive manner.

The form was developed as part of the Centers for Disease Control and Prevention's Sudden Unexplained Infant Death Initiative to standardize investigations of and reports on the causes of sudden infant deaths. The eight-page form is divided into nine sections: investigation data, witness interview, infants medical history, infants dietary history, pregnancy history, incident scene investigation, investigation summary, investigation diagrams, and summary for pathologist.

The form is intended for use by states, counties, and local jurisdictions on a voluntary basis to gather information about the circumstances surrounding all sudden, unexplained infant deaths. The SUIDI reporting form and information about how to use it are available at: [www.cdc.gov/SIDS/SUIDHowtoUseForm.htm](http://www.cdc.gov/SIDS/SUIDHowtoUseForm.htm).

For information about Sudden Unexplained Infant Death Investigation in Maryland contact Dr. Tasha Greenberg at the Office of the Chief Medical Examiner, 410-333-8840 or at [greenbergt@OCMEMD.org](mailto:greenbergt@OCMEMD.org).

## Access to Prenatal Care Not Significantly Improving Pregnancy Outcomes for Minorities

Although access to prenatal care in the US has increased in recent years, minorities continue to experience disproportionately high rates of miscarriage and newborn mortality, according to new research published in the March issue of *Obstetrics and Gynecology*. The study suggests that the problem stems from a prenatal care system that does not adequately address racial and ethnic disparities in women's health.

The study was comprised of 35,529 pregnant women (5% black, 22% Hispanic, 68% white, 5% other) with access to early prenatal care. All participants were enrolled in the First and Second Trimester Evaluation of Risk (FASTER) trial between 1999 and 2002. Researchers monitored perinatal loss at three intervals less than 24 weeks of gestation, 24 or more weeks of gestation, and newborn death.

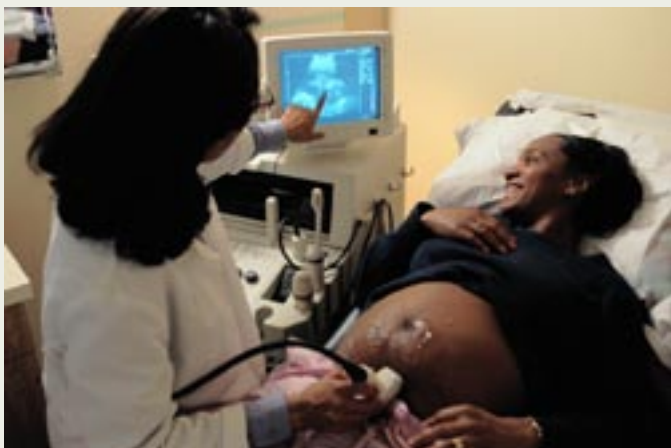
Overall, 1.3 percent of pregnancies ended in miscarriage or newborn death. All minorities experienced significantly higher perinatal mortality than whites, with blacks having the highest rate. For every 1,000 pregnancies, there were 42.1 perinatal losses for blacks, 16.6 for those classified as other, 15.9 for Hispanics, and 10 for whites. While blacks comprised only five percent of the study sample, they accounted for 16 percent of the perinatal mortalities.

Minority women had an increased incidence of preexisting health conditions such as diabetes, hypertension, and being overweight, and had higher rates of smoking. Additionally, minorities were more likely to experience pregnancy complications such as preterm premature rupture of the membranes, preeclampsia, gestational diabetes, preterm birth, and caesarean delivery. Racial disparities in perinatal mortality remained even after controlling for these factors.

The benefits of regularly scheduled prenatal care visits are well documented. However, this study demonstrates that increased accessibility to early prenatal care has not had as positive an effect on minority communities as expected. The authors suggest developing and incorporating new prenatal care strategies for minority women to help lower perinatal mortality.

Contact: Andrew J. Healy, MD, Columbia University Medical Center, New York, NY, at: [ajh2102@columbia.edu](mailto:ajh2102@columbia.edu).

American College of Obstetricians and Gynecologists News Release, February 28, 2006.



## Antibiotic Linked to Preterm Delivery in High-Risk Pregnancies

The antibiotic Flagyl (metronidazole), sometimes given for uterine infection to prevent preterm delivery, may actually increase the risk. In a study of nearly 100 high-risk women, those receiving it were 60 percent more likely to deliver their babies preterm compared with a placebo group.

While previous studies have shown that Flagyl can be effective at preventing preterm delivery in high-risk women, the current study prospectively followed high-risk women identified not only on the basis of clinical history but by a fetal fibronectin test, and included pregnant women between 23 and 24 weeks' gestation who were at known risk for preterm birth because of uterine abnormality or previous preterm birth or late miscarriage. Of about 900 women identified, 99 had a positive fetal fibronectin test.

"In view of compelling evidence that infection plays an important role in the etiology of preterm birth, an adverse response to antimicrobials is difficult to explain," the authors said. "It has been postulated that 'dying' microorganisms may result in an inflammatory response that increases the risk of delivery." The results "suggest that the commonly used antimicrobial agent metronidazole when used alone has no benefit in the prevention of preterm delivery in high-risk women," they concluded. "Indeed, this and other clinical trials suggest positive harm. We therefore do not recommend continued use of metronidazole in the clinical setting for the prevention of preterm delivery."

Flagyl is FDA-approved for treatment of a variety of infections, including gynecologic infections. Adequate, well-controlled studies have not been done in pregnant women, however, according to the drug's label, and use of this drug during pregnancy "should be restricted to those in whom alternative treatment has been inadequate."

Extracted from *Medpage Today*  
<http://www.medpagetoday.com/OBGYN/Pregnancy/tb/2490>.

Original study available at: *BJOG: An International Journal of Obstetrics and Gynaecology* Volume 113 Issue 1, Page 65, January 2006.

[www.blackwell-synergy.com/doi/abs/10.1111/j.1471-0528.2005.00788.x](http://www.blackwell-synergy.com/doi/abs/10.1111/j.1471-0528.2005.00788.x).

## Calcium Supplements Reduce Complications During Pregnancy

Preeclampsia, the development of high blood pressure and protein in the urine during pregnancy and its more severe complications such as eclampsia, can threaten the lives of both mother and child. While there is no therapy to prevent preeclampsia, a link to calcium deficiency has been suggested. In a study published in the March issue of the American Journal of Obstetrics and Gynecology, researchers across the globe, under the auspices of the World Health Organization (WHO), investigated whether a calcium supplement could reduce the complications and mortality from this condition.

Over 8,300 women with low dietary calcium (<600 mg/day, about half of that recommended during pregnancy) were selected for the study. The subjects were randomly divided into two groups that had similar gestational ages, demographic characteristics, and normal blood pressures before treatment started. Half were given 1.5g of a calcium supplement per day and half received a placebo.

While the incidence of preeclampsia was not statistically different in the supplemented women, eclampsia, other severe complications, and severe gestational hypertension were significantly lower. Overall, the severe preeclamptic complications index and the severe maternal morbidity and mortality index, including all severe conditions, were also reduced with calcium.

Preterm and early preterm delivery (<32 weeks) tended to be reduced among women under 20 years of age who were at highest risk for low calcium and complications. It is very important to note that neonatal mortality was also lower in the calcium group.

This multicenter, randomized, placebo-controlled, double-blind trial was performed at antenatal care centers located in Rosario, Argentina; Assiut, Egypt; Nagpur and Vellore, India; Lima, Peru; East London and Johannesburg, South Africa; and Ho Chi Minh City, Vietnam. These centers are part of the WHO Maternal and Perinatal Research Network, each having extensive clinical trial experience.

Writing in the article, Jose Villar, MD, states, "This large randomized trial in populations with low calcium intake demonstrates that while supplementation with 1.5 gm calcium/day did not result in a statistically significant decrease in the overall incidence of preeclampsia, calcium significantly decreased the risk of its more serious complications, including maternal and severe neonatal morbidity and mortality, as well as preterm delivery, the latter among young women."

*Primary Source: WHO Randomized Trial of Calcium Supplementation Among Low Calcium Intake Pregnant Women by Jose Villar, MD; et al, on behalf of the WHO Calcium Supplementation for the Prevention of Preeclampsia Trial Group, American Journal of Obstetrics and Gynecology, Volume 194, Issue 3. March, 2006.*



### Minor Maternal Trauma Can Be Deadly for Fetus

Insignificant trauma to the mother may not be insignificant to the fetus, Dr. William G. Barsan said at a conference on obstetrics, gynecology, perinatal medicine, neonatology, and the law.

60 to 70 percent of fetal losses resulting from maternal trauma follow relatively minor maternal injuries, said Dr. Barsan, professor and chair of emergency medicine at the University of Michigan, Ann Arbor. Placental abruption is the cause of fetal death in 50 percent to 70 percent of losses after maternal trauma. This is the one that may occur with relatively minor trauma and can be hard to detect, he said.

Perform electronic fetal monitoring for four hours on any pregnant woman with a viable fetus who sustains a significant impact to the torso from falling, crashing, or other causes, Dr. Barsan advised. In one study, all patients with placental abruption after trauma developed uterine contractions every 25 minutes at some point during a four hour monitoring period.

Many women will have uterine contractions after trauma, and most will not have placental abruption. At Dr. Barsan's institution, women with frequent uterine contractions after trauma receive an additional 24 hours of electronic fetal monitoring. This seems to be a protocol that works pretty well to identify patients at risk of placental abruption, he said at the conference sponsored by Boston University. Even if the patient says that she fell yesterday, or last night, do four hours of monitoring, he added. Traumas unrelated to the torso such as hammering a finger do not call for monitoring.

*OB. Gyn. News, Volume 41, Issue 5, 01, March 2006.*



## ACOG Recommends Restricted Use of Episiotomies

The use of episiotomy during labor should be restricted, with physicians encouraged to use clinical judgment to decide when the procedure is necessary, according to a new Practice Bulletin published by The American College of Obstetricians and Gynecologists (ACOG) in the April issue of *Obstetrics and Gynecology*. According to ACOG, “The best available data do not support the liberal or routine use of episiotomy. Nonetheless, there is a place for episiotomy for maternal or fetal indications such as avoiding severe maternal lacerations or facilitating or expediting difficult deliveries.”

Episiotomy is a surgical incision made into the perineum (the region between the vagina and the anus) to widen the vaginal opening for delivery. Episiotomy was performed in more than one-fourth of all vaginal deliveries in 2002. Although rates of episiotomy have decreased in recent years, it is still one of the most commonly performed procedures in obstetrics.

Recent studies show that common indications for episiotomy were based on limited data. Additionally, there was a general underestimation of potential adverse consequences associated with the procedure, including extension to a third- or fourth-degree tear, anal sphincter dysfunction, and painful sex. Data suggest that women who have an episiotomy do not have significantly improved labor, delivery, and recovery compared with those who do not have one. Without sufficient data to develop evidence-based criteria for performing episiotomies, clinical judgment remains the best guide to determine when its use is warranted, according to ACOG.

Historically, the procedure has been indicated in circumstances such as abnormal labor progression, non-reassuring fetal heart rate pattern, vacuum- or forceps-assisted vaginal delivery, and shoulder dystocia. It also was believed to hasten the second stage of labor and reduce the risk of spontaneous perineal tearing, subsequent pelvic floor dysfunction, urinary and fecal incontinence, and sexual dysfunction.

“In the case of episiotomy, as with all medical and surgical therapies, we need to continually evaluate what we do and make appropriate changes based on the best and most current evidence available,” said the document’s author, ACOG Fellow John T. Repke, MD. “We should avoid the pitfall of letting anything in medicine become ‘routine’ and therefore, outside the realm of review and critical analysis.”

*Practice Bulletin #71, “Episiotomy,” is published in the April 2006 issue of Obstetrics and Gynecology.*

### Promoting Development Through Child Health Service Roundtable Proceedings Available

The February 2006 supplement to the *Journal of Developmental and Behavioral Pediatrics* contains the proceedings from the Help Me Grow Roundtable: Promoting Development through Child Health Services held on June 1, 2005, in Hartford, CT.

The supplement, published with support from the Commonwealth Fund, presents a historical overview and information on enhancing developmental services in primary care, and the role of a statewide information and referral system in enhancing children’s and families’ access to developmental programs and services.

Other topics addressed include overcoming barriers through training and education, supporting and enhancing developmental services, implications for expansion and dissemination, and next steps.

The supplement is available to subscribers at: [www.jrnldbp.com/pt/re/jdbp/currenttoc.htm;jsessionid=EQqBLOLx6kmCGWUY9uA654dng3xrhF40FWNi38FTeYfBHYnuDtrx!-1070481199!-949856145!9001!-1](http://www.jrnldbp.com/pt/re/jdbp/currenttoc.htm;jsessionid=EQqBLOLx6kmCGWUY9uA654dng3xrhF40FWNi38FTeYfBHYnuDtrx!-1070481199!-949856145!9001!-1).



# Calendar Events

## April

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### Women's and Children's Health and the Environment

Sponsored in part by Health Care Without Harm, American College of Nurse-Midwives' Division of Women's Health Policy and Leadership; Environmental Health Working Group, the Association of Women's Health, Obstetric and Neonatal Nurses, the National Association of Nurse Practitioners in Women's Health; and the National Association of Pediatric Nurse Practitioners. CEUs available, ACNM specialty credit has been applied for. For more information contact Katie Huffling, The University of Maryland School of Nursing, Office of Professional Development and Continuing Education, at 410-706-2351, or e-mail: [khuff002@son.umarland.edu](mailto:khuff002@son.umarland.edu).

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### Strategies for Promoting Parent-Child Connectedness

Training for Youth service/Teen Pregnancy Prevention Program staff. 8:30 a.m. to 4:15 p.m., at the University of Maryland School of Social Work in downtown Baltimore. Sponsored by the Maryland Department of Health and Mental Hygiene's Center for Maternal and Child Health in cooperation with the University of Maryland School of Social Work. CEUs will be offered for Social Workers, Psychologists and Counselors. For registration and information contact Christine L. Evans, 410-767-6042, or e-mail: [clevans@dhhm.state.md.us](mailto:clevans@dhhm.state.md.us).

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### 24th Annual Reproductive Health Update

8:45 a.m.-3:45 p.m. at the Ten Oaks Ballroom in Clarksville. Sponsored by the Maryland Department of Health and Mental Hygiene's Center for Maternal and Child Health, TRAINING 3, and Howard Community College. Includes a comprehensive review of selected family planning knowledge, skills and current issues for reproductive health care providers in Maryland and around the region who offer low-cost, high-quality reproductive health services to women and men in need. Topics meet continuing educational needs of reproductive health

professionals regardless of their discipline or practice setting. Continuing education credits for nurses, nurse midwives, and social workers applied for. Exhibitors will be present to discuss their current services, programs and products. There is a link to the RHU conference brochure at the CMCH website: [www.fha.state.md.us/mch](http://www.fha.state.md.us/mch).

For additional information, contact Helene O'Keefe, Center for Maternal and Child Health, 410-767-6723, or e-mail: [okeefeh@dhhm.state.md.us](mailto:okeefeh@dhhm.state.md.us).

## May

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### Maryland Partnership for Prevention Health Promotion Conference

"Points Across III: Making and Measuring a Difference in Health Promotion" will be held at the Sheraton Columbia Hotel. MPP will introduce Coalition University, a series of workshops designed to assist public health professionals in building and maintaining health coalitions. Offered as a pre-conference, Coalition University is scheduled for Tuesday, May 16. For more information, access the brochure for both the conference and Coalition University at: [www.edcp.org/pdf/Brochure-FINAL\\_020906.pdf](http://www.edcp.org/pdf/Brochure-FINAL_020906.pdf).

For further information, please e-mail: [mdpartnershipforprevention@msn.com](mailto:mdpartnershipforprevention@msn.com) or call 410-902-4677.

CHES: MPP has been designated as a Category I provider and credentialed to offer up to 12 CECH units for Points Across III.

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### Communicating about Sexuality with High Risk Youth

Training for Youth service/Teen Pregnancy Prevention Program staff, 8:30 a.m. to 4:15 p.m., at the University of Maryland School of Social Work in downtown Baltimore. Sponsored by the Maryland Department of Health and Mental Hygiene's Center for Maternal and Child Health in cooperation with the University of Maryland School of Social Work. A light lunch and breakfast will be provided. Registration fee is \$125. CEUs will be offered for Social Workers, Psychologists and Counselors.

For registration and information contact Christine L. Evans, at 410-767-6042, or e-mail [clevans@dhhm.state.md.us](mailto:clevans@dhhm.state.md.us).

## June

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### Immigration Reform: Where is it Headed?

The 24th Annual Conference of the Maryland Coalition for Refugees and Immigrants, 8:30 a.m.-4:00 p.m. Anne Arundel Community College, Arnold, MD. Cost is \$25 paid in advance.

Agenda: AM-plenary session and choice of one of five 1-hour workshops; Lunch; PM-choice of one 3-hour workshop or two 90-minute workshops.

Workshop titles will include: Immigration 101; Outreach to the Latino community: 3 Short Video Tools; Immigrant Parenting and Gang Prevention; But I have permission to work! - Employment Law and Immigrants; Introduction to Community Interpretation; Planning to Fight a Pandemic: How Can Immigrants Be Included? And Much More! For additional information, or to volunteer for the conference committee, contact Pat Hatch at The Maryland Office for New Americans, 410-767-8970.

## September

28-30

The National Perinatal Association's 2006 Conference at the Melrose Hotel in Washington, DC.

The theme of this year's conference is On the Road to Optimizing Perinatal Health: Join us for the Journey. The conference will highlight best practices in perinatal health care delivery. For more information about the conference, contact Conference Planning Committee Co-chair Carla Bailey, 410-404-8520 or [cbailey@miemss.org](mailto:cbailey@miemss.org).

## Ongoing

### Breastfeeding Support Program

Shady Grove Adventist Hospital every Wednesday from 2pm-3:30pm. All breastfeeding moms and their babies are welcome to attend regardless of where they delivered. At least one IBCLC is always present to help answer questions, check a latch, weigh a baby, discuss returning to work, breast pumps etc. Sometimes new moms might just like a place to go to meet other new moms who are breastfeeding. We do follow Montgomery County schools regarding cancelation for inclement weather. For further information, call 1-800-542-5096 or 301-279-MOMS.